Aluminum High Efficiency Exploding Foil Initiator Development and Testing

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ABSTRACT - This joint Kaman Aerospace Raymond Engineering Operations-Lawrence Livermore National laboratory paper presents the development of a novel and high efficiency aluminum exploding foil initiator and the performance testing executed by the Lawrence Livermore National Laboratories.

Raymond Engineering will present an overview of the development and the physical features of the design. This will include the motivating background, approach, comparative materials used, lessons learned, and technical advantages of the produced product.

LLNL will present the testing methodology, an overview of the equipment and facilities, and the results obtained. Test results are expected to include burst time variance, flyer velocity, and explosive threshold levels. A comparative assessment of the technology (e.g. aluminum vs. copper, etc.) is also expected to be presented.

A joint assessment of the value and advantages of cooperative work may be presented as well.

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